USGS
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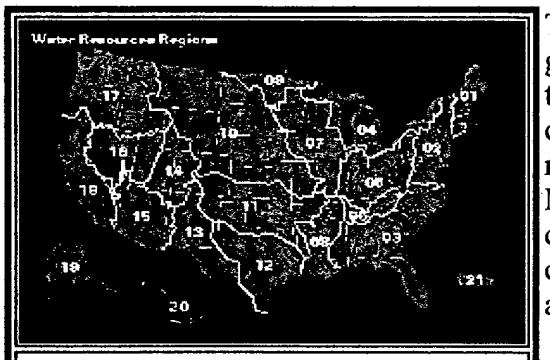
Water Resources

Hydrologic Unit Maps

What are Hydrologic Units?

Adapted from Seaber, P.R., Kapinos, F.P., and Knapp, G.L., 1987, Hydrologic Unit Maps: U.S. Geological Survey Water-Supply Paper 2294, 63 p. Updated information not from this source is enclosed in square brackets. A copy of USGS Water-Supply Paper 2294 may be ordered from USGS Information Services

The United States is divided and sub-divided into successively smaller hydrologic units which are classified into four levels: regions, sub-regions, accounting units, and cataloging units. The hydrologic units are arranged within each other, from the smallest (cataloging units) to the largest (regions). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to eight digits based on the four levels of classification in the hydrologic unit system.



[Figure 1. Map of Water Resources Regions] Click for a larger (13K) image.

The first level of classification divides the Nation into 21 major geographic areas, or regions. These geographic areas contain either the drainage area of a major river, such as the Missouri region, or the combined drainage areas of a series of rivers, such as the Texas-Gulf region, which includes a number of rivers draining into the Gulf of Mexico. Eighteen of the regions occupy the land areaof the conterminous United States. Alaska is region 19, the Hawaii Islands constitute region 20, and Puerto Rico and other outlying Caribbean areas are region 21. [The regions are shown in figure 1.]

The second level of classification divides the 21 regions into 222 subregions. A subregion includes the area drained by a river system, a reach of a river and its tributaries in that reach, a closed basin(s), or a group of streams forming a coastal drainage area.

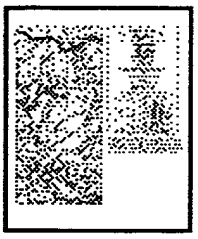
The third level of classification subdivides many of the subregions into accounting units. These 352 hydrologic accounting units nest within, or are equivalent to, the subregions.

The fourth level of classification is the cataloging unit, the smallest element in the hierarchy of hydrologic units. [Efforts are underway to add further levels of subdivisions.] A cataloging unit is a geographic area representing part of all of a surface drainage basin, a combination of drainage basins, or a distinct hydrologic feature. These units subdivide the subregions and accounting units into smaller areas. There are 2150 Cataloging Units in the Nation. [Cataloging Units sometimes are called "watersheds." See, for example, the EPA Surf Your Watershed site.]

List of Hydrologic Units

Download the text-formatted list of hydrologic units names and numbers from USGS Water-Supply Paper 2294. in either the original format or in tab-delimited format.

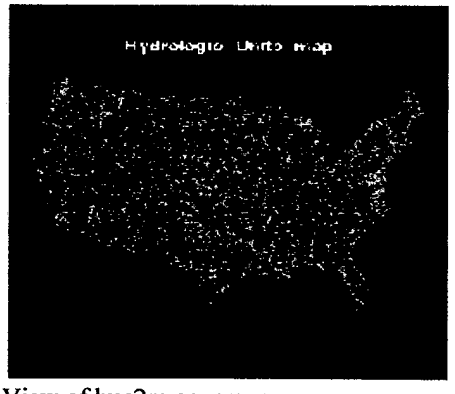
Paper Maps



A single-sheet hydrologic unit map of the U.S. is available published at a scale of 1:3,500,000 and the map measures 41- by 58-inches. This map is part of *The National Atlas of the United States of America* series. "Hydrologic Units" is available from USGS at a cost of $7.00 per sheet. Its stock number is TUS5681. The "Hydrologic Units" atlas map supersedes both the "Hydrologic Unit Map of the United States, East" (GHU0057-1T) and the "Hydrologic Unit Map of the United States, West" (GHU0057-2T). Additional information regarding this map is available at: http://www.nationalatlas.gov/atlasmap.html.

Paper maps may be ordered from USGS Information Services

Digital Spatial Data Sets



View of huc2m coverage.

See Metadata
1:2,000,000
1:250,000

1:2,000,000-scale Hydrologic Units (huc2m)

The coverage is available on line, at no charge, via links from the metadata file.

1:250,000-scale Hydrologic Units (huc250k)

The data for this large coverage was originally collected for the Geographic Information Retrieval and Analysis System (GIRAS) at a scale of 1:250K. Some areas, notably major cities in the west, were recompiled at a scale of 1:100K. The coverage was compiled to provide the National Water Quality Assessment (NAWQA) study units with an intermediate-scale river basin boundary for extracting other GIS data layers.

The coverage is available on line, at no charge, via links from the metadata file. It may be retrieved as a single file for the entire U.S., or by Water Resources Region.

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